



# NGTB45N60S1WG

Manufacturer Part Number	<b>NGTB45N60S1WG</b>
Manufacturer	<b>onsemi</b>
Allelco Part Number	32D-NGTB45N60S1WG
ECAD Model	Request Free CAD Models
Parts Description	IGBT 45A 600V TO-247
Package	TO-247-3
Data sheet	<b>NGTB45N60S1WG.pdf</b>



**Get a Quote**

NGTB45N60S1WG - onsemi.New Original in Stock. Download Linear Technology NGTB45N60S1WG datasheet/specifications on AllelcoElec.com.  
Request a quote for NGTB45N60S1WG, please send us email: [info@allelco.com](mailto:info@allelco.com)

## Specifications

NGTB45N60S1WG Tech Specifications  
NGTB45N60S1WG - onsemi technical specifications, attributes, parameters

Product Attribute	Attribute Value	Product Attribute	Attribute Value
Manufacturer	onsemi	Package / Case	TO-247-3
Voltage - Collector Emitter Breakdown (Max)	600 V	Package	Tube
Vce(on) (Max) @ Vge, Ic	2.4V @ 15V, 45A	Operating Temperature	-55°C ~ 175°C (TJ)
Test Condition	400V, 45A, 100hm, 15V	Mounting Type	Through Hole
Td (on/off) @ 25°C	72ns/132ns	Input Type	Standard
Switching Energy	1.25mJ (on), 530μJ (off)	IGBT Type	Trench
Supplier Device Package	TO-247-3	Gate Charge	125 nC
Series	-	Current - Collector Pulsed (Icm)	180 A
Reverse Recovery Time (trr)	70 ns	Current - Collector (Ic) (Max)	90 A
Power - Max	300 W	Base Product Number	NGTB45

## Parts with Similar Specifications

The three parts on the right have similar specifications to onsemi NGTB45N60S1WG

Product Attribute	NO PICTURE			
Part Number	NGTB45N60S1WG	NGTB40N60FLWG	NGTB50N65FL2WG	NGTB40N65FL2WG
Manufacturer	onsemi	onsemi	onsemi	onsemi
Test Condition	400V, 45A, 100hm, 15V	400V, 40A, 100hm, 15V	400V, 50A, 100hm, 15V	400V, 40A, 100hm, 15V
Supplier Device Package	TO-247-3	TO-247	TO-247-3	TO-247-3
Gate Charge	125 nC	171 nC	220 nC	170 nC
Voltage - Collector Emitter Breakdown (Max)	600 V	600 V	650 V	650 V
Package	Tube	Tube	Tube	Tube
Current - Collector Pulsed (Icm)	180 A	160 A	200 A	160 A
Reverse Recovery Time (trr)	70 ns	77 ns	94 ns	72 ns
Power - Max	300 W	257 W	417 W	366 W
IGBT Type	Trench	Trench Field Stop	Trench Field Stop	Trench Field Stop
Operating Temperature	-55°C ~ 175°C (TJ)	-55°C ~ 150°C (TJ)	-55°C ~ 175°C (TJ)	-55°C ~ 175°C (TJ)
Base Product Number	NGTB45	NGTB40	NGTB50	NGTB40
Current - Collector (Ic) (Max)	90 A	80 A	100 A	80 A
Series	-	-	-	-
Package / Case	TO-247-3	TO-247-3	TO-247-3	TO-247-3
Switching Energy	1.25mJ (on), 530μJ (off)	890μJ (on), 440μJ (off)	1.5mJ (on), 460μJ (off)	970μJ (on), 440μJ (off)
Input Type	Standard	Standard	Standard	Standard
Vce(on) (Max) @ Vge, Ic	2.4V @ 15V, 45A	2.1V @ 15V, 40A	2V @ 15V, 50A	2V @ 15V, 40A
Mounting Type	Through Hole	Through Hole	Through Hole	Through Hole
Td (on/off) @ 25°C	72ns/132ns	85ns/174ns	100ns/237ns	84ns/177ns

## NGTB45N60S1WG Datasheet PDF

Download NGTB45N60S1WG pdf datasheets and onsemi documentation for NGTB45N60S1WG - onsemi.

### Datasheets

[NGTB45N60S1WG.pdf](#)

### Environmental Information

[onsemi RoHS.pdf](#)

### PCN Obsolescence/ EOL

[Mult Dev EOL 18/Oct/2018.pdf](#)

## PCN Design/Specification












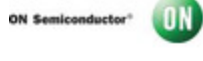






 FPCN20461X 27/nov/2015.pdf

## PCN Assembly/Origin

 NGTBYYY 28/Aug/2017.pdf

## Customers Also Interested in

### Recommended Products

					
<b>NGTB40N60FLWG</b> onsemi IGBT 600V 80A 257W TO247	<b>NGTB50N65FL2WG</b> onsemi IGBT TRENCH/FS 650V 100A TO247-3	<b>NGTB40N65FL2WG</b> onsemi IGBT TRENCH/FS 650V 80A TO247	<b>NGTB40N60L2WG</b> onsemi IGBT TRENCH/FS 600V 80A TO247	<b>NGTB45N60S2WG</b> onsemi IGBT 45A 600V TO-247	<b>NGTB40N60FL2WG</b> onsemi INSULATED GATE BIPOLAR TRANSISTO
					
<b>NGTB40N65FL2</b> AMI Semiconductor/onsemi	<b>NGTB50N60FLWG</b> onsemi IGBT 600V 50A TO247	<b>NGTB50N65S1WG</b> onsemi IGBT TRENCH 650V 140A TO247	<b>NGTB50N120FL2WG</b> onsemi IGBT 1200V 100A 535W TO247	<b>NGTB60N60SWG</b> onsemi IGBT 600V 120A 298W TO247	<b>NGTB40N60IHLWG</b> onsemi IGBT 600V 40A TO247
					
<b>NGTB40N65IHRTG</b> onsemi IGBT 650V 40A	<b>NGTB50N60FWG</b> onsemi IGBT 600V 100A 223W TO247	<b>NGTB50N60FL2WG</b> onsemi IGBT 600V 50A TO247	<b>NGTB50N60L2WG</b> onsemi IGBT 600V 50A TO247	<b>NGTB40N65IHL2WG</b> onsemi IGBT TRENCH/FS 650V 80A TO247-3	<b>NGTB40N65IHRT</b> AMI Semiconductor/onsemi

## Shipment

### Delivery Time

In-stock items can be shipped within 24 hours. Some parts will be arranged for delivery within 1-2 days from the date all items arrive at our warehouse. And Allelco ships order once a day at about 17:00, except Sunday. Once the goods are shipped, the estimated delivery time depends on the shipping methods and Delivery destination. The table below shows are the logistic time for some common countries.

### Delivery Cost

> Use your express account for shipment if you have one.

> Use our account for the shipment. Refer to the table below for the approximate charges.

(Different time frame / countries / package size has different price.)

### Delivery Method

> Global Common Shipment by DHL / UPS / FedEx / TNT / EMS / SF we support.

> Others more shipping ways, please get in touch with your customer manager.

Common Countries Logistic Time Reference		
Region	Country	Logistic Time(Day)
America	United States	5
	Brazil	7
Europe	Germany	5
	United Kingdom	4
	Italy	5
Oceania	Australia	6
	New Zealand	7
Asia	India	6
	Japan	7
Middle East	Israel	6

DHL & FedEx Shipment Charges Reference	
Shipment charges(KG)	Reference DHL(USD\$)
0.00kg-1.00kg	USD\$60.00
1.00kg-2.00kg	USD\$70.00
2.00kg-3.00kg	USD\$80.00

**Note:** The above table is for reference only. There may have some data bias for the uncontrollable factors.

Contact us if you have any questions.

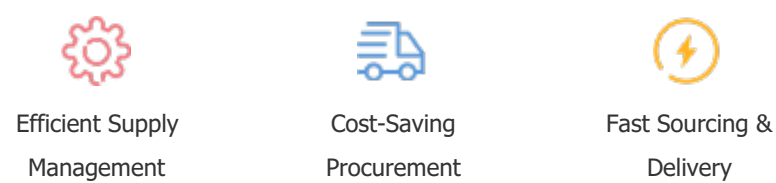
### Payment Support

The payment method can be chosen from the methods shown below:

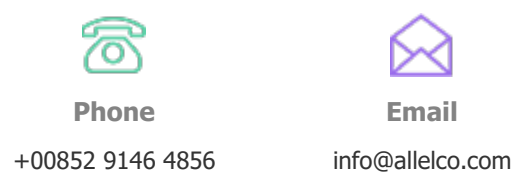
Wire Transfer (T/T, Bank Transfer), Western Union, Credit card, PayPal.



### Your Faithful Supply Chain Partner -



Contact us if you have any questions.



### Certifications & Memberships



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